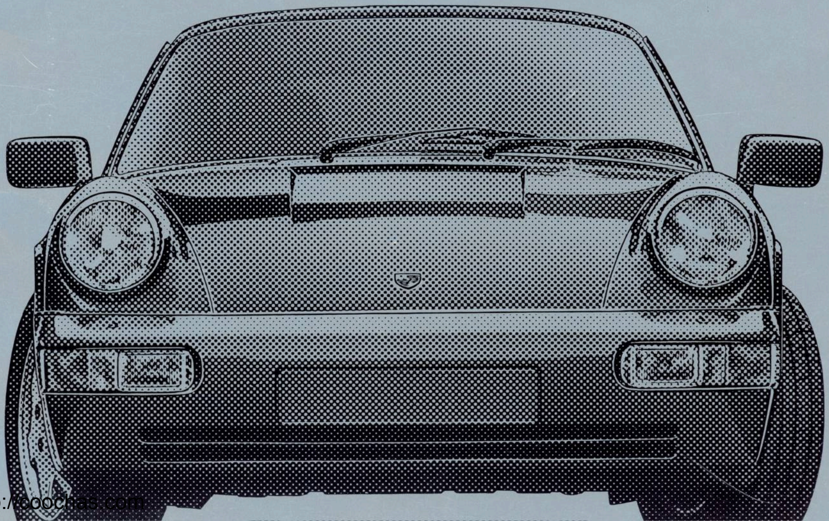
PORSCHE

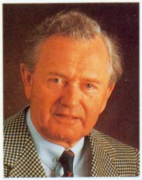
911 Carrera 2 / 911 Carrera 2 tiptronic
911 Carrera 4 / 911 turbo



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When we first started building sports cars over 40 years ago, it was to meet our own exacting requirements. The cars we designed had to satisfy our love of driving.

Since then experience has taught



us that performance, handling and styling are values sought by other drivers who see their car as a form of pleasure and not merely a means of transport.

Today, the continued world-wide demand for Porsche makes our belief in the sports car stronger than ever.

Our enduring participation in international motorsport remains the best possible advertisement for the Marque. But it also fulfils another important function. It provides the ultimate challenge for our engineers and the toughest possible testing ground for our technology.

This relentless search for swifter, safer and more reliable performance has made our Development Centre at Weissach an internationally renowned nucleus of technical innovation. Nowhere has its effect been felt more fully than in the state-of-the-art engineering of the Porsche 959 and the subsequent development of the current 911 Series.

These incomparable cars utilise the most advanced technology to set new standards in sporting performance. However, as you would expect of Porsche, environmental and economic concerns have not been ignored. Indeed, such is the exceptional build quality and overall model consistency that the long-term value of a 911 is one of its greatest attractions.

Despite over 25 years of constant development, the sporting character and timeless identity of the 911 remains as unique as the day it was launched.

We designed our first Porsche to provide the most satisfying driving experience in the world. In this latest generation of the 911 we have set ourselves the same objective. How successfully we have achieved our goal, you can discover in the following pages.

Yours faithfully

Ferry Porsche

SUCCESS IS THE BEST PROOF.

The Porsche 911 is a legend. No other performance car in the world has as rich a heritage. With its distinctive shape and totally individual character, the 911 has appealed to true driving enthusiasts for over two decades.

Over this period, the 911 has enjoyed unrivalled racing success, proof of the Porsche philosophy that nothing provides a sterner test than the heat of competition. With it's speed and endurance, the 911 has achieved success and accolades in all spheres of motor-sport, whether winning at Monte Carlo, the Targa Florio or in the harsh conditions of the Paris-Dakar Rally; racing at Silverstone or the Nürburgring; or even facing the ultimate endurance of 24 hours at Le Mans.

It should come as no surprise that the 911 holds the unchallenged position of being the most successful production racing car of all time.

From its launch in 1963, twenty-six years of constant technical evolution and an unceasing search for improvement has seen the 911 remain at the forefront of engineering excellence.

Racing involvement has produced a stream of innovations that have passed directly into road-going models.

Developments such as the modified engine and aerodynamic body refinements of the new 911 Turbo, the all-wheel-drive of the Carrera 4 (derived from the limited edition Porsche 959), and the Tiptronic transmission of the 911 Carrera 2 — all were based on experience gained from the racetrack before they graduated to the road.

The result is that no car is richer in racing heritage and engineering achievement than today's Porsche 911. More importantly, no other car can offer the sporting driver a greater challenge or greater rewards.



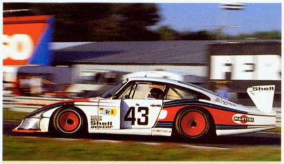
The classic challenge of the Targa Florio in Sicily 1970.


The arduous conditions of the 1972 Safari Rally.

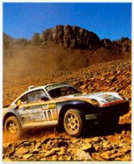


Circuit racing at Vallelunga in 1976.


Le Mans 1974. The ultimate test of endurance.



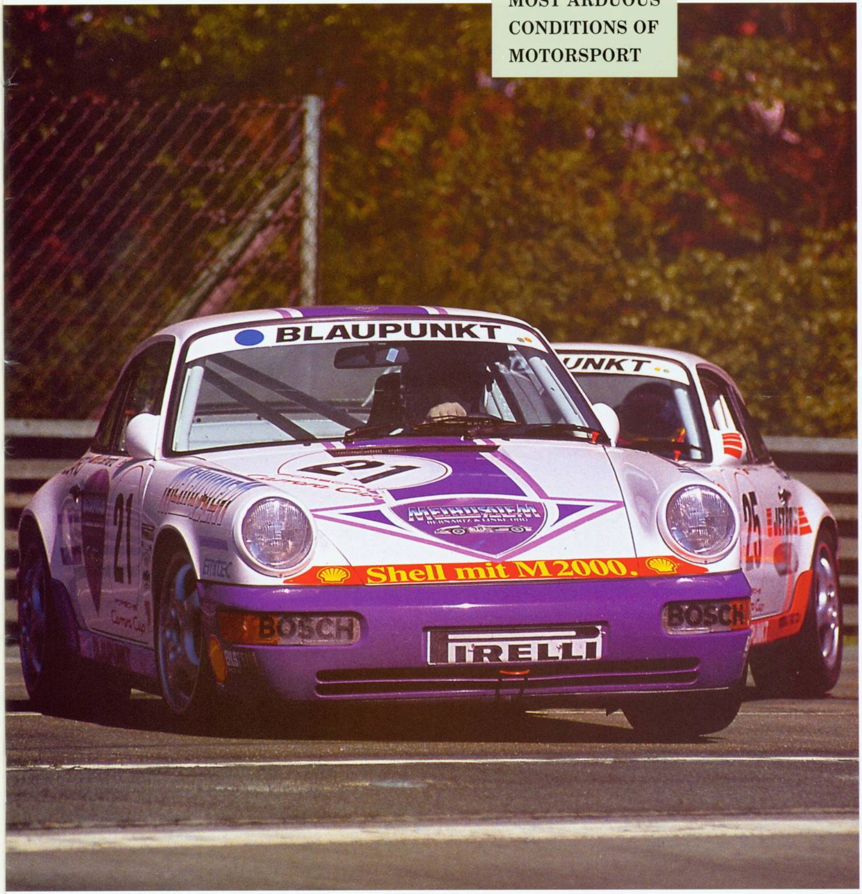
The closest of finishes at Le Mans 1978.


Victory for the Porsche 959 in the testing 1986 Paris-Dakar Rally.



The special racing version of the Carrera 2 competing in the 1990 Carrera Cup.

TESTED IN THE MOST ARDUOUS CONDITIONS OF MOTORSPORT

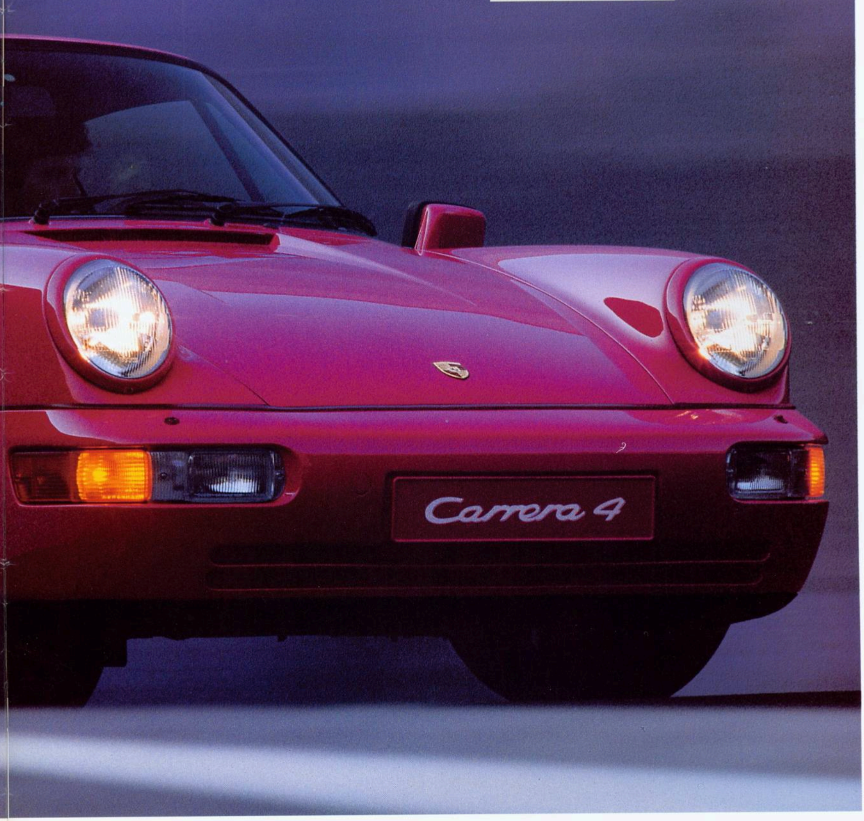


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PORSCHE 911: A NEW ERA FOR THE DRIVING LEGEND



THE NEW 911 TURBO: RACE-BRED FOR THE ROAD

The flagship of the 911 Series. Like all previous versions, the new 911 Turbo is the product of constant motorsport development.

The result – a car that is part road car, part thoroughbred racer, that is in a class of its own. Originally the first production sports car ever to be turbocharged, the new 911 Turbo retains its position as the world's most coveted supercar.

The famous 3.3 litre 6-cylinder, horizontally opposed, turbocharged engine has been modified to produce 320 bhp (235 kW) at 5,750 rpm. The torque of this phenomonal engine has also been improved with a new maximum of 450 Nm being produced at just 4,500 rpm. This takes the 911 Turbo to further heights of performance, accelerating from a standing start to 62.5 mph in an exhilerating 5.0 seconds and on to a top speed of over 167 mph.

The modified turbocharger, more efficient intercooler, revised air intake and all-electronic ignition system have improved response right across the rev range, providing impressive acceleration with vast reserves of power.

The advanced aerodynamic design of the 911 Turbo has been further refined to optimise airflow, resulting in near zero lift. Available only as a Coupé, the new Turbo now shares the same 85% new 911 body design developed for the 911 Carrera 2 and 4, but features flared wheel-arches and a fixed rear spoiler for the classic elegance of its predecessors.

The aerodynamically optimised features include advanced new underbody floor panels, deformable thermoplastic front and rear body sections and redesigned wing mirrors.

The chassis has also been improved. These enhancements include the introduction of ABS anti-lock braking and power-steering as standard. The front and rear suspension assemblies have been extensively revised to ensure superb road-holding under all conditions.

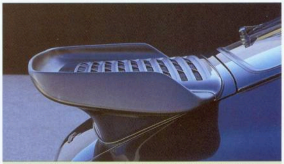
The new 911 Turbo is fitted with striking new light alloy, five spoke 17 inch 7J x 17 front and 9J x 17 rear wheels. Fitted with 205/50 ZR 17 and 255/40 ZR 17 ultra-low profile tyres respectively, these enhance the 911 Turbo's distinctive appearance.

With typical Porsche concern for the environment, the 911 Turbo is equipped with a state-of-the-art metal-based controlled 3-way catalytic converter. This helps to reduce the toxic emission levels from the twin tailpipes of the Turbo to a minimum but causes no reduction in power.

The 911 Turbo has always been a classic sports car built in the great tradition of Porsche race-proven technology and is remarkable, despite its supercar performance, in its suitability for every-day use. This special appeal is now taken one stage further by the dynamic power of the new 911 Turbo.



Even the wing mirrors have been designed for optimum airflow and efficiency.



The advanced, aerodynamic rear spoiler, which has provision for an effective intercooler, reduces lift but retains the classic appearance of the Turbo.

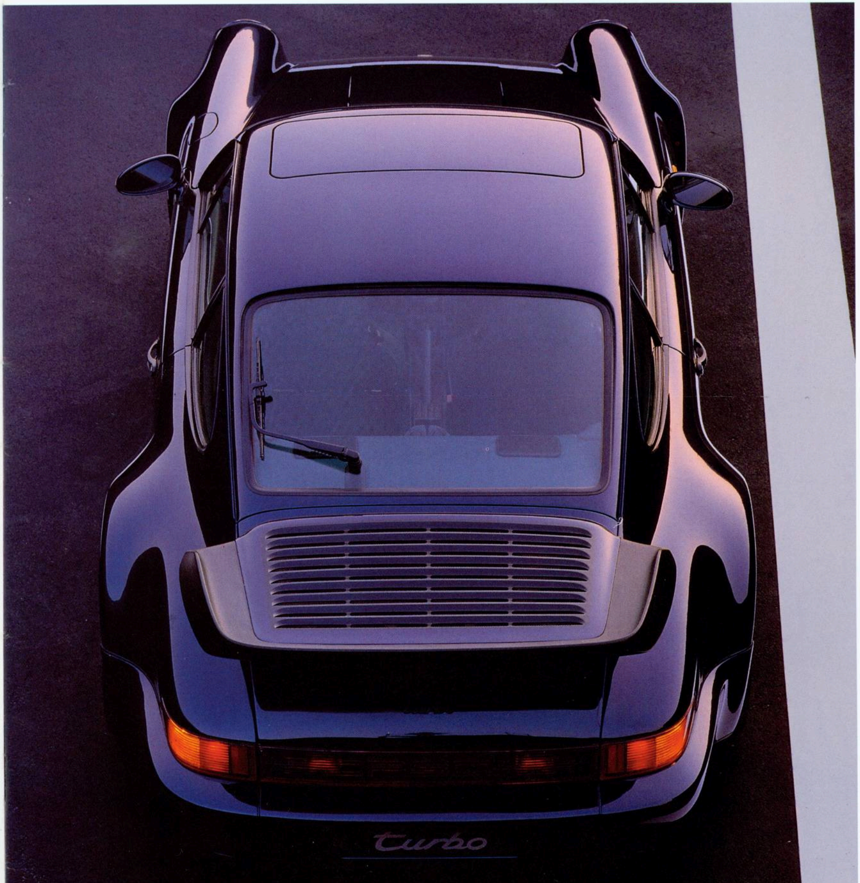


The Turbo is now equipped with a catalytic converter at no loss of power.



The legendary 6-cylinder, turbocharged boxer engine now produces 320 bhp.

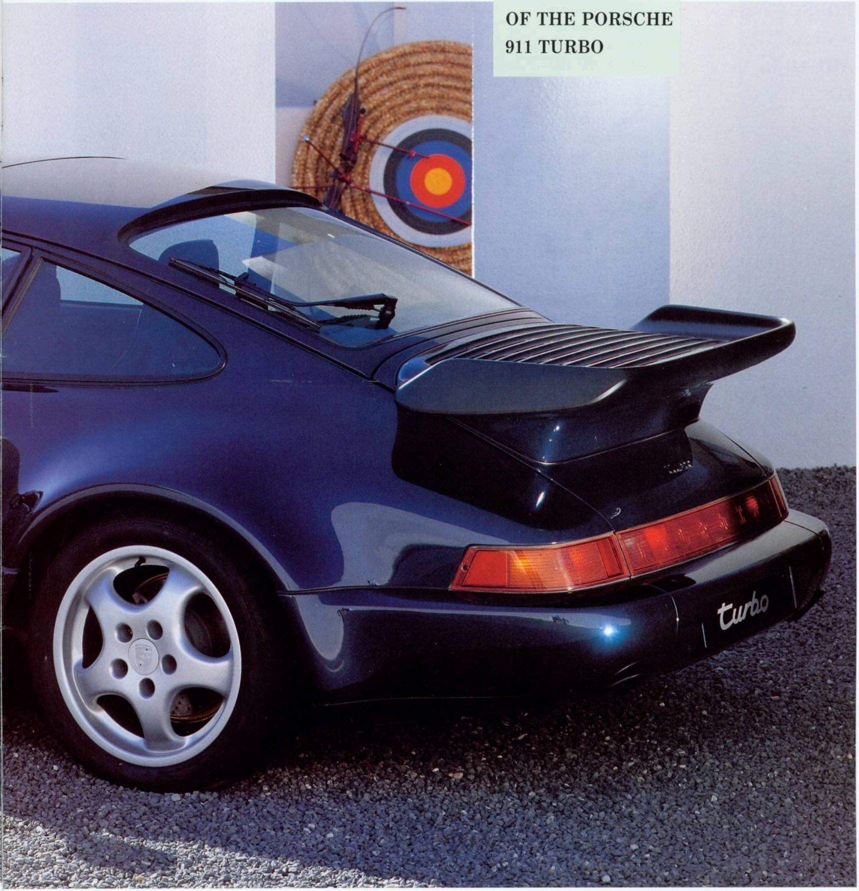
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turbo



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THE ENDURING HALLMARK OF THE PORSCHE 911 TURBO



PORSCHE 911: A CLASSIC AHEAD OF ITS TIME

The Porsche 911 is the epitome of engineering excellence. Both the 911 Turbo, 911 Carrera 2 and 911 Carrera 4 set new standards in high performance motoring.

Although over 85% of the components of the new 911 Series have been redesigned, the aerodynamically optimised bodystyle remains faithful to the classic lines of the original 911.

Numerous subtle but significant changes to the body by the engineers at the Development Centre at Weissach have produced a design of classic elegance and impressive aerodynamic efficiency.

Advanced thermoplastic front and rear body panels are both in keeping with the 911's sleek contours and help to optimise the airflow over the car.

Deformable to minimise damage to the bodywork in a light impact, these panels encase resilient bumpers.

The 911 models are also the first full production Porsches to inherit the smooth underbody floor panels developed from the Le Mans winning Porsche 956 and 962. These underbody panels optimise the airflow under the car, at the same time as reducing lift through the benefits of ground effect technology.

Together with the more aerodynamic bonded windscreen, smooth rain gutters and the streamlined sill mouldings, these aerodynamic improvements combine to significantly reduce drag. A drag-coefficient of 0.32 is achieved in the case of the 911 Carrera, exceptional within this high performance class.

Another major benefit of this advanced body design is the reduction of destabilising lift to near zero, greatly improving roadholding at high speed.

To maintain this optimum airflow at speed, and for enhanced engine cooling, all 911 models feature an aerodynamic rear spoiler.

For both the 911 Carrera 2 and 4, this revolutionary rear spoiler is retractable.

Automatically extending at around 50 mph, the spoiler both reduces lift and doubles the volume of engine air-intake for more efficient cooling. To maintain the purity of the classic 911 body design, the spoiler retracts at around 6 mph.

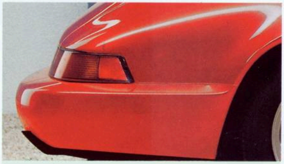
In the case of the 911 Turbo, the larger rear spoiler is permanently fixed and has provision for the enlarged charge air intercooler.

The advanced aerodynamics of the 911 Series are tuned to a highly advanced chassis and driveline and all feature the legendary 911 flat six-cylinder engine.

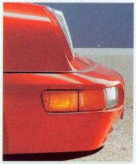
It is no wonder then that the 911 Series represents one of the most powerful yet composed high performance cars in the world. And equipped with anti-lock brakes and a controlled 3-way catalytic converter as standard, greater driver and environmental safety are assured.



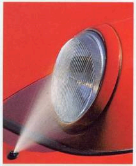
Integral foglamps and indicators are recessed to improve aerodynamics.



Aerodynamic refinements include deformable front and rear thermoplastic body panels to optimise the airflow and absorb low speed impacts.

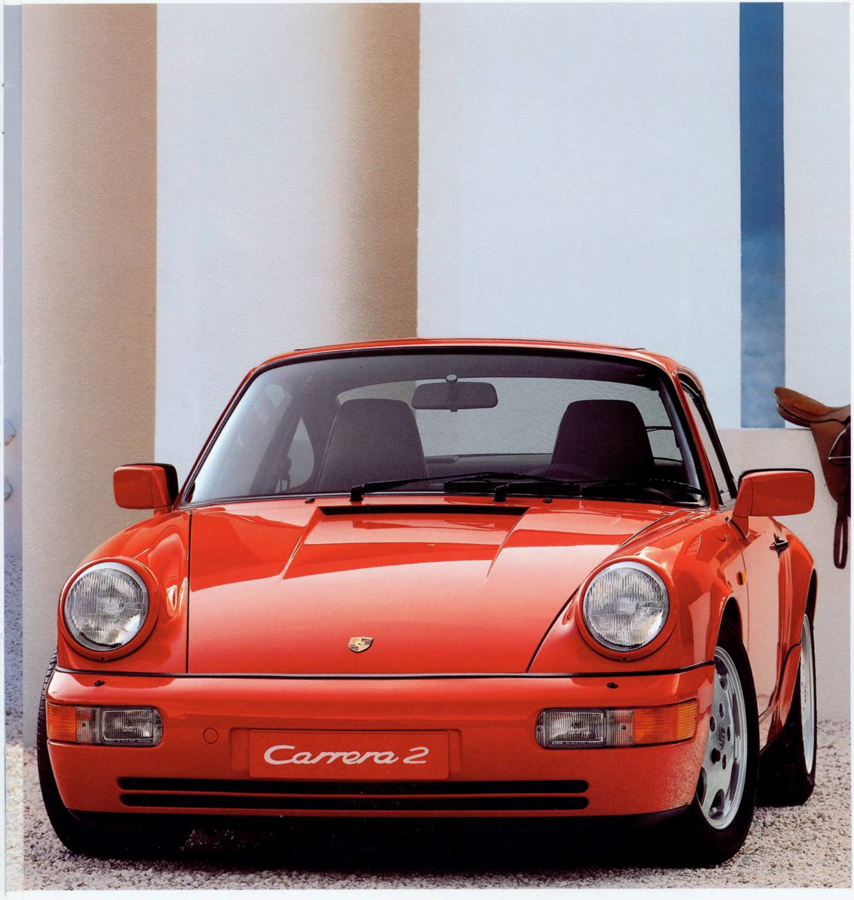


The deformable body panels encase resilient bumpers.



The powerful headlights are kept clean with a high pressure water-jet.

http://coochas.com


Carrera 2



The unique rear aerodynamic spoiler automatically extends at around 50 mph to reduce lift and increase engine cooling.




Carrera 2
Carrera 2


Carrera 2



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THE EXHILARATION OF OPEN-TOP MOTORING.

A Porsche has never been designed to be a mass-produced car. Instead, it has always been an exclusive marque produced for the most discerning of drivers. Nowhere can this be better seen than in the 911 Series, and in particular in the 911 Carrera.

With a range of different models available, the Porsche 911 Carrera can truly be described as a car for the individual.

Whether the Carrera 2, with its rear-wheel-drive, or the Carrera 4 with the unmatched capability of its advanced all-wheel-drive system, both exemplify the legend of the classic 911.

However, the breadth of choice does not stop there. Both the 911 Carreras are available in three distinctive bodystyles - Coupé, Targa and Cabriolet. Each retains all of the characteristics that have made the Porsche 911 such an enduring classic, whilst enabling the performance minded driver to tailor the 911 Carrera to their particular requirements.

The performance potential of the 911 Carrera Coupé is not at the expense of all-round driveability and everyday practicality. The 911 has more than adequate luggage space, whilst the 2+2 coupé concept allows even occasional rear passengers to enjoy the thrill of performance motoring.

In addition to all the driving pleasures inherent with the 911 Series, the Porsche 911 Carrera Targa contributes an added dimension to 911 driving, enabling all the sensual delights of open-air motoring to be enjoyed.

Ever since Porsche first developed the Targa concept, it has had many imitators, although none have ever had the rare charisma of the 911 Targa.

With its stylish streamlined wrap-around rear window, distinctive integral roll-over bar and detachable folding roof panel, the Targa is the perfect compromise between Coupé and Cabriolet. It is no wonder that a 911 Targa is now exhibited at the Museum of Modern Art in New York as a study in exemplary modern design.

However, for those open-top enthusiasts who desire even more than this, the only car to drive is the 911 Carrera Cabriolet, one of the world's swiftest and most stylish soft-tops.

As would be expected of Porsche, even the design of the hood is a masterpiece of engineering. Fully electrically operated, it can be opened or closed at the touch of a button, automatically locking into place with the precision that is a Porsche hallmark.

The windscreen pillars have been strengthened and maintain the safety standards of the 911 Carrera Coupé. The inherent tautness of the hand-built floor pan ensures the original driving character of the 911 is retained, whilst the Cabriolet hood offers a unique sense of driving freedom.

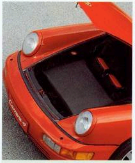
Whichever 911 Carrera bodystyle you choose, all provide performance motoring at its most exhilarating.



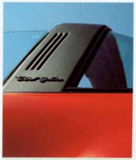
The unique roof panel provides safe and secure driving comfort.



When removed, all the delights of open-air motoring can be enjoyed.



The roof panel may be folded when detached for easy storage.



The Targa is the perfect compromise between Coupé and Cabriolet.


YONEX
Carrera 2
Carrera 2



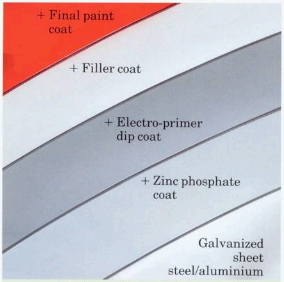
http://coochas.com



A masterpiece of effortless transformation. Fully electrically powered, the Cabriolet hood opens and closes in seconds at the touch of a button.



THE PORSCHE PHILOSOPHY: STYLE WITH FUNCTION.



The external bodywork is meticulously covered in four layers of the highest quality, low solvent paint, which is then safeguarded by a 3-year guarantee.

At a time when mass-production has dictated conformist methods of assembly, the 911 has continued to be built to a very different principle, that of the pursuit of excellence.

Precision engineered and almost entirely hand-assembled by the most attentive of craftsmen, a 911 takes almost five times as long to construct as a conventional vehicle.

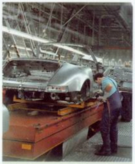
This tradition of meticulous attention to detail continues with the current 911 Series.. Each 911 is built to the highest of standards using special hot-dip, cold rolled zinc-covered fully galvanised sheet steel. If the bodywork is scratched, the zinc covering spreads over the effected area allowing the bodywork to, in essence, heal and protect itself.

To prove the long-term effectiveness of this process, an unpainted galvanised 911 body has stood outside the Weissach Development Centre since 1976, withstanding all weathers with no detrimental effect.

Porsche is so confident of the success of this protection against corrosion that each 911 is covered by the unique Porsche Longlife 10-year anti-corrosion body warranty. The first manufacturer to offer such long-term assurance, this body warranty is maintenance-free, apart from a minimal annual inspection after the first two years, and offers an unrivalled level of protection. The build quality and precision also extends to the thoroughbred engine, again largely hand-assembled. Each is bench-tested throughout the full power range to ensure that it performs to perfection. Then, like all the mechanical and the electrical components of the 911 Series, it is protected by a 2-year unlimited mileage mechanical warranty for complete peace of mind.

This pursuit of excellence can also be seen in the exterior finish. All areas of the external bodywork are covered in four layers of the highest quality paint. Each layer is meticulously checked to ensure the deep and even lustre demanded of every Porsche, and then safeguarded by a 3-year warranty.

With long-term durability and model consistency built into every 911, no other car can provide such a worthwhile investment for the driver who pursues perfection.



The longevity of Porsche workmanship has become legendary.



Each 911 is protected by the Porsche 10-year anti-corrosion body warranty.



Only the highest quality materials are used for the assembly of a 911.

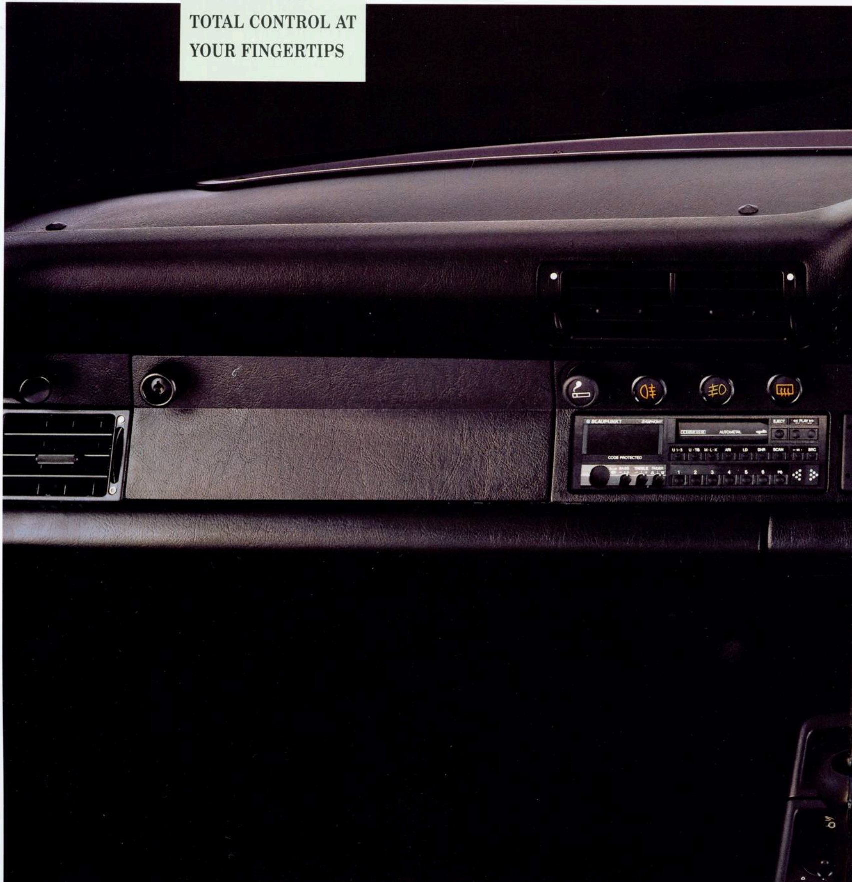


Advanced production facilities are combined with hand-built quality.

A COMMITMENT TO QUALITY AND DURABILITY



PORSCHE ERGONOMICS: TOTAL CONTROL AT YOUR FINGERTIPS



http://coochas.com


1/min x 1000
MPH

THE PORSCHE INTERIOR: MADE TO MEASURE COMFORT

The 911 interior is the perfect balance of tradition with advanced ergonomics and reflects Porsche's endurance racing experience.

The informative dashboard features large backlit dials for excellent clarity. Extra information is provided through a comprehensive monitoring system that continuously checks the primary functions of the car, alerting the driver to any malfunction.

All instruments and controls are ideally positioned for ease of use, optimising driver concentration and physical comfort.

The anatomically correct front seats of the 911 Carrera are equipped with electrical adjustment of the front and rear squab angle. Full electrical adjustment (standard on the 911 Turbo) is available as an option, as are specially contoured Sport seats, electric seat heating, and adjustable lumbar support.

A wide variety of interior trims are offered to add that extra touch of individual luxury. With the 911 Turbo, an attractive full leather interior is provided as standard, as is a useful on-board computer.

As a high performance sports car, the 911 is rare in providing two occasional rear seats that are ideal for children or, over short journeys, even adults. Equipped with full, recoiling seatbelts, the rear seats may be folded down to effectively increase the luggage capacity.

An advanced fully automatic heating and ventilation system creates an ideal environment for both driver and passengers. Developed for ease of operation, the system allows the driver to maintain a preselected interior temperature of their choice, dependent on the ambient conditions.

This system also features impressive demisting capabilities and complements the 911's standard electric front windows and heat filtering, tinted glass. Powerful air-conditioning is also available and is standard on the 911 Turbo.

Finally, a range of high quality audio equipment is available and, to help protect the exterior and interior, both an advanced electronic alarm system, activated by the central-locking, and locking wheel-nuts come as standard.



The anatomically correct seats are electrically adjustable for optimum driving comfort.



The automatic temperature control provides efficient demisting in all conditions.



The integral alarm system is automatically armed by the central-locking system.



The rear seats may be individually folded to allow extra versatility.



THE HEART OF THE LEGEND: THE AIR-COOLED SIX CYLINDER BOXER ENGINE

The powerful heart of the 911 Series is the famous 6-cylinder "boxer" engine, one of the most successfully race-proven engines in existence.

Totally unique, this compact and light, rear-mounted power unit is air-cooled, with three horizontally opposed cylinders on either side of the crankcase.

The 3.6 litre engine fitted to the 911 Carrera 2 and 4 is, like the revised 3.3 litre turbocharged version of the new 911 Turbo, one of the latest developments of this legendary engine. Producing 250 bhp, it is the most powerful normally-aspirated 911 production engine to date.

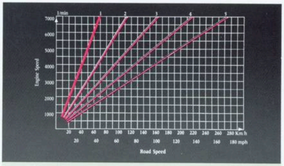
The 911 Carrera features an advanced engine management system, which includes the innovative 'Electronic Octane™ Knock Control'. This system, operating selectively on each individual cylinder, automatically adjusts the ignition to prevent harmful engine 'knock' caused by poor quality fuel.

With a twin ignition system and a high 11.3:1 compression ratio, the 911 Carrera engine provides instant response at even the lowest revs, with a torque figure of over 250 Nm being achieved at less than 2,000 rpm.

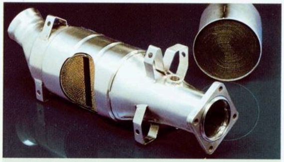
Torque remains available throughout the rev range, with the maximum of 310 Nm reached at a relaxed 4,800 rpm. This unrivalled flexibility makes the 911 Carrera extremely enjoyable to drive, with enormous reserves of power always on hand.

With 250 bhp DIN (184 kW) developed at 6,100 rpm, the 911 Carrera reaches further heights of performance, accelerating from a standing start to 62.5 mph in 5.7 seconds and onto a top speed of 162 mph.

Like the Turbo, the Carrera operates on unleaded petrol and is equipped with a metal-based controlled 3-way exhaust gas catalytic converter, with no reduction in engine power. For the first time on a production car, this race-proven system is made from stainless steel rather than ceramic materials, resulting in maximum performance, optimum exhaust emissions, enhanced converter longevity and quicker effectiveness.



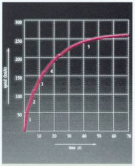
The 5-speed race-proven gearbox, with its ideally spaced ratios, allows the full performance potential of the 911 Carrera to be enjoyed.



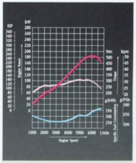
The legendary 911 engine is the first in the world to be equipped with a metal 3-way catalytic converter to minimise harmful exhaust emissions.

The engine is partially encapsulated to reduce noise, whilst still retaining the 911's unmistakable engine note. The result is that, even at high cruising speeds, normal conversation or the high quality sound of the audio system can be enjoyed in relaxed comfort.

With greater performance and increased environmental acceptability, the advanced engines of the latest 911 Series set new performance car standards.



The 3.6 litre engine takes the 911 Carrera to new heights of acceleration.



The unrivalled flexibility of the engine allows for instant response at all revs.



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THE PORSCHE TIPTRONIC: A NEW WAY TO CHANGE GEAR

Whilst the other 911 models are equipped with a 5-speed manual gearbox, the Carrera 2 with Tiptronic features the revolutionary new Tiptronic transmission.

This remarkable system combines an electro-hydraulically controlled 4-speed transmission, together with a combination of manual and automatic gear selection. It also features an innovative intelligent gearshift programme. The result – the driving simplicity of an automatic combined with all the advantages of manual control.

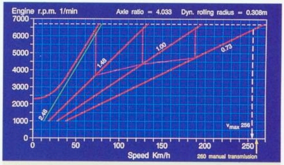
The gear shift features a manual selection plane, reached from the automatic drive position (D). Immediate upward or downward clutchless gear changes are possible just by tipping the gear-lever forward or backwards. The current gear and transmission mode are displayed inside the speedometer.

Engine over-revving is avoided by automatic upward gearshifts at maximum engine revs and by the prevention of inadvertent downward gear changes. Automatic downshifts also occur as the engine nears its idling speed.

By avoiding the need to release the throttle whilst changing gear, yet allowing direct gear changes at any time, the Tiptronic allows the full performance of the Carrera 2 to be enjoyed.

In its fully automatic mode, the Tiptronic also features an innovative electronic 'Intelligent Shift Programme'. This prevents the unwanted gear changes that can occur with some conventional automatic gearboxes, especially whilst cornering.

An electronic control unit constantly monitors both vehicle speed, engine speed, throttle position and movement, and longitudinal and lateral acceleration. Using this information, five automatic gear shift programmes are provided, ranging from economy to high performance. By selecting the most appropriate gear shift programme, the Tiptronic continually adjusts the gear change points to match every demand from the driver. This allows the perfect balance between safety, performance, comfort and efficiency.

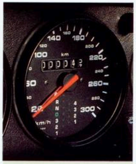


The acceleration of the 911 Carrera 2 is optimised both by the ideally spaced gear ratios and the revolutionary Intelligent Shift Programme.

Under braking, coasting or cornering, the gear change points are altered to avoid unwanted changes. Additional safety is provided for braking on slippery surfaces by automatic upward gearshifts should wheel slip be detected.

When overtaking, uncomfortable kickdown effects are avoided. Faster movement of the accelerator pedal is all that is needed to shift to the most sporting programme. All unnecessary gear changes are avoided. Once the pedal is relaxed again, the Tiptronic returns to its original programme.

The Carrera 2 with Tiptronic (like the Turbo) also features a useful on-board computer. Available as an option for the other Carrera models, this provides added information such as outside temperature and fuel consumption.



A display in the speedometer indicates the gear and transmission mode.



Automatic gearshifts are enhanced by an intelligent gearshift programme.



The Tiptronic combines the advantages of both a manual and an automatic.

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PORSCHE
Carrera 2

THE PORSCHE CHASSIS: BUILT-IN SAFETY

To enable the sporting driver to enjoy its full performance potential, the 911 Series features an advanced chassis, suspension and braking system.

The front suspension system, with its use of independent light alloy lower wishbones and inclined McPherson struts, provides for unmatched cornering and straight-line stability.

At the rear, the independent suspension features semi-trailing arms and coil springs with integral shock absorbers. For the 911 Turbo, these components have been uprated to handle the extra performance potential.

Perhaps the most significant feature is the innovative self-correcting rear axle. This automatically counteracts the natural tendency of any rear axle to oversteer during high speed cornering, particularly when the throttle is suddenly closed.

The rack and pinion steering is both positive and precise and provides the driver with a genuine "feel" as to the behaviour of the car and the road conditions. For safety, it features a telescopic steering column, designed to collapse in a collision to protect the driver.

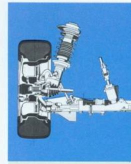
Progressive power assistance is included to allow effortless parking and relaxed cornering. The Porsche-developed system is progressive and load sensitive. The result is that, whilst at speed there is minimal assistance, as the steering load increases the power assistance comes into play, reaching its maximum during parking or very slow manoeuvring.

For added safety, anti-lock braking (ABS) is also featured, operating in conjunction with the dual circuit, power assisted braking system. Allied with large internally ventilated discs, with 4-piston fixed light alloy brake calipers (2-piston at the rear of the Carrera 2), this braking system provides astonishing stopping power, without fear of the brakes locking and any resultant skidding on wet or poor surfaces.

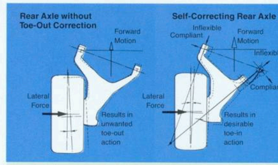
The "cadence-braking" effect of this system is the result of a sophisticated hydraulic control unit. This lets brake pressure build up until wheel slip occurs, and then either holds or reduces it depending on individual tyre adhesion. Wheel slip is detected by electronic sensors fitted to each wheel which monitor changes in rotational speed. As a result, the car is provided with optimum directional stability when braking in all conditions.

For the most demanding drivers, the 911 Carrera chassis can even be upgraded, using a combination of uprated coil springs, shock absorbers and anti-roll bars.

As would be expected, the chassis is based on experience gained in the most arduous conditions of motorsport to give the driver complete confidence in the unsurpassed handling and braking potential of the 911 Series.



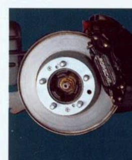
Independent front suspension features light alloy wishbones with McPherson struts.



The self-correcting action of the 911 rear axle (right) prevents oversteer during cornering compared with a normal semi-trailing arm suspension (left).



The 911 is equipped with an anti-lock braking system for the first time.

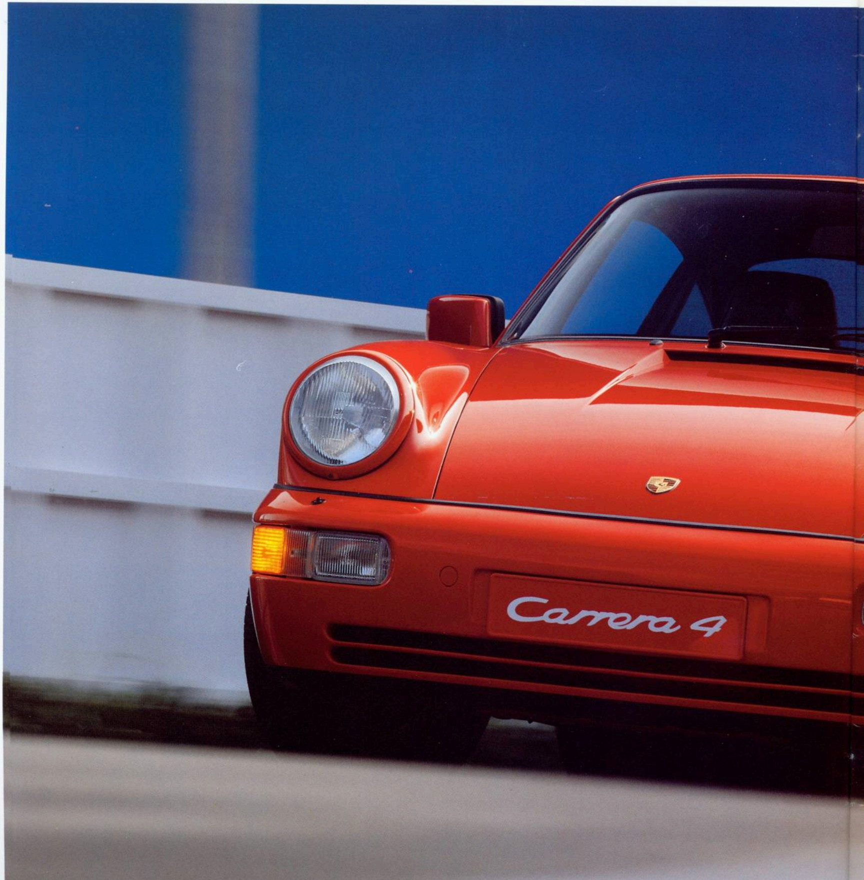


The internally ventilated front disc brakes feature four piston calipers.

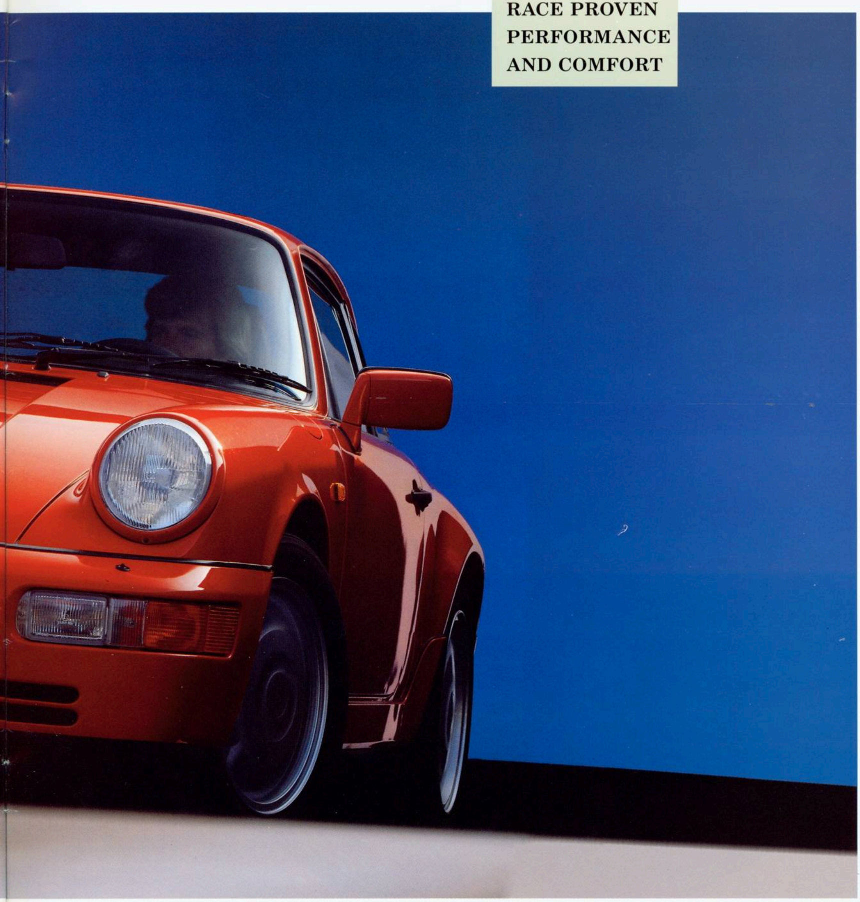
RACE PROVEN AERODYNAMIC GROUND EFFECT TECHNOLOGY



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Carrera 4

PORSCHE 911: RACE PROVEN PERFORMANCE AND COMFORT



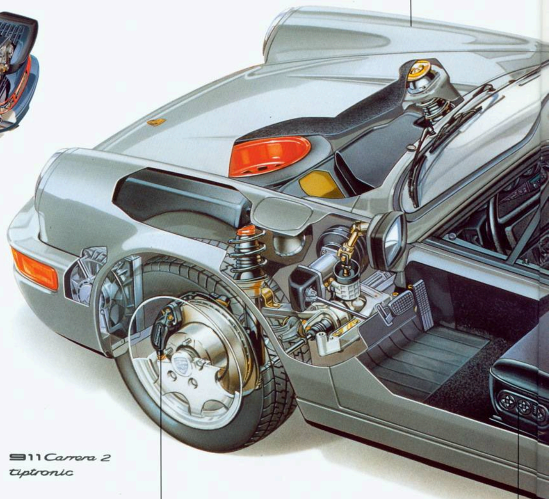
Fully galvanised steel construction, with 2-year mechanical, 3-year paintwork and 10-year anti-corrosion warranties.



911 Carrera 4



911 Turbo



911 Carrera 2 tiptronic

Progressive power-assisted steering with independent front suspension. Dual circuit anti-lock braking system with ventilated discs and 4-piston calipers. 6J x 16 wheels with 205/55 ZR 16 ultra-low profile tyres.

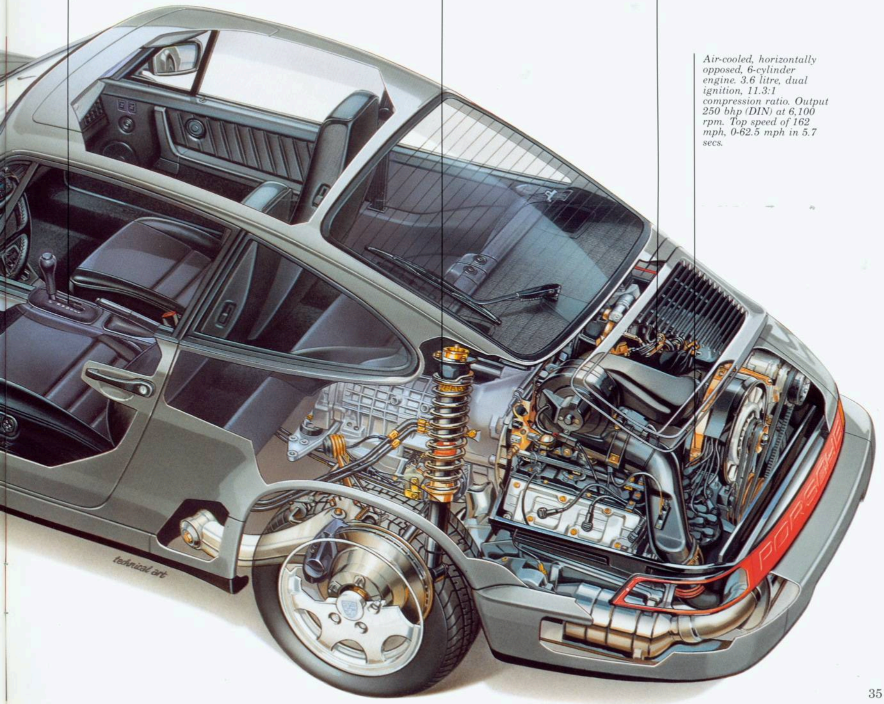
2+2 seating accommodation with electrically height adjustable front seats and individually split, fold-down rear seats.

The Porsche Tiptronic – a revolutionary transmission combining an electro-hydraulically controlled 4-speed gearbox, together with a combination of manual and automatic gear selection. Also featured is an innovative intelligent gearshift programme.

Independent rear suspension with coil-spring shock absorbers and self-correcting rear axle. 8J x 16 wheels with 225/50 ZR 16 ultra-low profile tyres.

Unique retractable rear spoiler, automatically extending at around 50 mph to increase downforce and engine cooling. Spoiler retracts at around 6 mph.

Air-cooled, horizontally opposed, 6-cylinder engine. 3.6 litre, dual ignition, 11.3:1 compression ratio. Output 250 bhp (DIN) at 6,100 rpm. Top speed of 162 mph, 0-62.5 mph in 5.7 secs.



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NEW ADVANCES IN TECHNOLOGY: PORSCHE ALL-WHEEL-DRIVE

The 911 Carrera 4 is the first full production car in the world to utilise an 'intelligent' all-wheel-drive system. This technology is the culmination of over eight years of development, combined with the experience gained from testing the system both on the road and in arduous competition.

The dynamic all-wheel-drive system of the 911 Carrera 4 represents the very latest development of this technology.

Building on the experience gained with the Porsche 959, it allows the driver to exploit the Carrera 4's power and handling to the full.

A new central driveshaft tube leads from the 5-speed gearbox at the rear of the car to the front axle. This allows the distribution of engine power to the front wheels using an advanced longitudinal differential with hydraulic control.

Whilst under extreme conditions 100% of the available driving power can be delivered solely to the front or rear wheels, this unique planetary differential is preset to normally distribute 69% of the driving force to the rear wheels and 31% to the front.

This retains the classic rear-wheel drive character of the 911 Carrera and allows both optimum traction and handling stability in all conditions.

However, should any of the wheels begin to spin due to loss of traction, this will be recognised by the individual electronic ABS sensors. Driving traction will be maintained by the progressive operation of hydraulically operated locks in the longitudinal differential that engage to re-distribute the available driving effort.

This is all achieved using an electronic control unit which constantly compares the rotational speed of each individual wheel using the ABS sensors. If the microprocessor detects a difference in speed between the wheels of even as small as 0.5 mph, the hydraulically controlled longitudinal differential will engage, a process taking only 25 milliseconds. So advanced is this system that it can even detect and correct for any variation in wheel rotational speeds caused by differing tyre pressures.

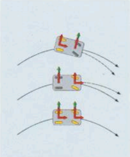
A further innovation of the all-wheel-drive system is the inclusion of an electronically controlled transverse differential, its function being two-fold.

Firstly, it offsets oversteer by producing an optimum distribution of the available driving effort between the rear wheels. Secondly, a manually controlled 'Traction Programme' allows maximum low-speed traction in the most adverse conditions, by locking both the transverse and longitudinal differentials.

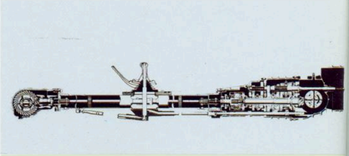
The 911 Carrera 4 truly represents a new era for the driving legend.



The 911 Carrera 4 combines high performance with supreme driving safety.



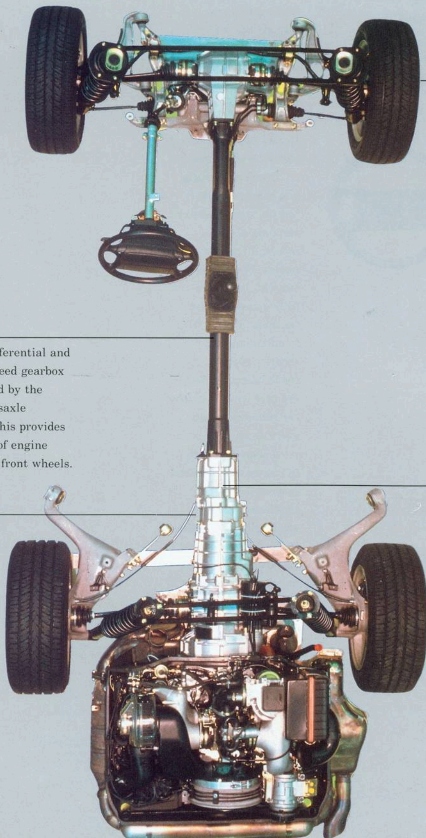
The revolutionary all-wheel-drive system is the most advanced in the world.



The advanced longitudinal planetary differential electronically distributes the driving force between all four wheels of the 911 Carrera 4.



Carrera 4: all-wheel-drive technology derived from the Porsche 959.



The amount of differential lock is dependent on the rotational speed of each individual wheel. Any variation in speed is detected through an electronic control which constantly monitors the ABS sensors.

The front differential and the rear 5-speed gearbox are connected by the central Transaxle driveshaft. This provides distribution of engine power to the front wheels.

The longitudinal differential allows the optimum distribution of the available driving effort, providing maximum traction and handling stability in all conditions.

The longitudinal planetary differential is preset to normally distribute 69% of the driving force to the rear wheels and 31% to the front.

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THE NEXT STEP TO YOUR PORSCHE.



Words and pictures alone can never capture the rare sensation of driving one of the world's finest high performance cars. Only a test drive at your Official Porsche Centre can truly reveal the 911's character.

Once on the road, you can immediately tell the smoothness and response of the powerful Porsche engine. From behind the wheel, you can fully appreciate the tautness of the handling and the security of the roadholding, sensing the ease with which the car responds to your every demand.

A closer look at the 911 Series will also reveal so much more. The excellence of the engineering, the flawless finish and the time and care that has gone into tailoring every interior. And of course, the famed hand-built quality that makes Porsche one of the world's truly great marques.

Further detailed information on Porsche and the Porsche Model Range is also available from your Official Porsche Centre. Staffed by Porsche enthusiasts, they will be pleased to introduce you to driving in its purest form.

The vehicles illustrated in this brochure may be fitted with Optional Equipment available at extra cost. Standard specification and Optional Equipment may vary according to market.

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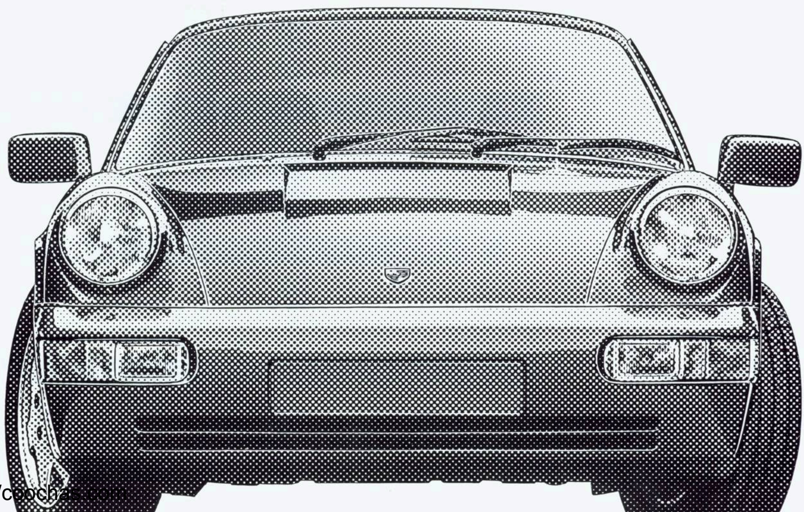
*Dr. Ing. h.c.F. Porsche AG,
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D-7000 Stuttgart 40.*

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PORSCHE

911 Carrera 2 / 911 Carrera 2 tiptronic
911 Carrera 4 / 911 turbo



TECHNICAL DATA

ENGINE

	Carrera 2/ Carrera 2 Tiptronic	Carrera 4	Turbo
Number of cylinders	6	6	6
Bore (mm)	100	100	97
Stroke (mm)	76.4	76.4	74.4
Capacity - effective (cm³)	3600	3600	3299
Compression ratio	11.3:1	11.3:1	7.0:1
Maximum power - kW (bhp DIN)/at rpm	184 (250)/6100	184 (250)/6100	235 (320)/5750
Maximum torque - Nm (EEC kpm)/at rpm	310 (31.6)/4800	310 (31.6)/4800	450 (45.9)/4500
Output per litre - kW (bhp DIN)	51.1 (69.4)	51.1 (69.4)	71.2 (97.0)
Petrol octane rating (RON)	95 unleaded	95 unleaded	95 unleaded

ENGINE DESIGN

Type and layout	Rear mounted, 6-cylinder, air-cooled, horizontally-opposed, light alloy, four stroke engine (equipped with metal controlled 3-way exhaust gas catalytic converter)		
Valve arrangement per cylinder	1 inlet, 1 exhaust, V-formation valves		
Valve operation	Single overhead camshaft per cylinder bank		
Lubrication	Dry sump lubrication; full flow oil filter; thermostatically controlled oil cooling		
Fuel injection	Bosch L-Jetronic with Digital Motor Electronics (DME); deceleration fuel cut-off; idle stabiliser		Bosch K-Jetronic with turbocharger and charge air intercooler

ELECTRICAL SYSTEM

Battery (V)	12	12	12
Battery capacity (Ah)	72	72	72
Alternator	115 A/1610 W	115 A/1610 W	115 A/1610 W
Ignition	Digital Motor Electronics (DME); Dual ignition and 'Electronic Octane™ Knock Control'		Electronic single ignition

TRANSMISSION

Clutch	Single dry plate; hydraulic operation		
Gearbox	Full synchromesh with 5 forward and 1 reverse gears (or Tiptronic: 4 forward and 1 reverse gears with manual and automatic gear selection); rear-wheel drive	Full synchromesh with 5 forward and 1 reverse gears; permanent dynamic all-wheel-drive system	Full synchromesh with 5 forward and 1 reverse gears; rear-wheel drive
Final drive ratio	3.444:1/ 3.667:1 Tiptronic	3.444:1	3.444:1

BODY

Type	2-door, 2 + 2 Coupé (Targa and Cabriolet — Carrera only); front and rear deformable thermoplastic body panels; other body panels constructed from hot-dip, cold rolled zinc-coated fully galvanised sheet steel; rear spoiler; removable folding roof panel (Targa only); fully electrically operated hood (Cabriolet only)

CHASSIS AND SUSPENSION

	Carrera 2/ Carrera 2 Tiptronic	Carrera 4	Turbo
Front suspension	Fully independent light alloy lower wishbones; inclined McPherson struts with adjustable coil springs; anti-roll bar		
Rear suspension	Fully independent with light alloy semi-trailing arms; adjustable coil springs encasing telescopic dampers; self-correcting rear axle; anti-roll bar		
Shock absorbers	Double acting, dual tube; gas filled		
Braking system	Anti-lock braking system (ABS); dual circuit hydraulic system; servo-assisted (Carrera 2); hydraulically assisted (Carrera 4); internally ventilated discs front and rear (cross-drilled on Turbo) equipped with 4-piston aluminium fixed brake calipers (2-piston for Carrera 2 rear); pressure compensating valve for the rear braking circuit; forced-air cooling for front brake discs; asbestos-free brake pads; brake pad wear indicator; handbrake acting mechanically on rear wheels.		
Wheels	Pressure cast light alloy 'Design 90' 6J x 16 front 8J x 16 rear	Pressure cast light alloy 'Design 90' 6J x 16 front 8J x 16 rear	Pressure cast light alloy 'Cup design' 7J x 17 front 9J x 17 rear
Tyres	205/55 ZR 16 front 225/50 ZR 16 rear	205/55 ZR 16 front 225/50 ZR 16 rear	205/50 ZR 17 front 255/40 ZR 17 rear
Steering	Rack and pinion steering with collapsible steering column; progressive power assistance		

CAPACITIES (all figures are approximate)

Engine oil (inc. oil filter)	11.5 litres	11.5 litres	13.0 litres
	(multigrade oil in compliance with manufacturer's specification)		
Gearbox oil	3.6 litres hypoid gear oil - rear differential (or Tiptronic: 9.0 litres torque converter fluid and 0.9 litres rear differential)	3.8 litres hypoid gear oil - rear differential; 1.2 litres front differential	3.7 litres hypoid gear oil - rear differential
Fuel tank	77.0 litres (inclusive of approximately 10.0 litres reserve)		
Screenwasher	7.4 litres (inclusive of fluid for headlamp washer system)		
Intensive windshield wash system	0.7 litre	0.7 litre	0.7 litre

FUEL CONSUMPTION

(Data in accordance with U.K. Energy Act 1976 and Passenger Car Fuel Consumption (Amendment) Order 1987, and EC-Standard 80/1268)

Engine equipped with controlled 3-way exhaust gas catalytic converter

Constant speed 56 mph (90 km/h)	36.2 mpg (7.8 l/100 km)	35.3 mpg (8.0 l/100 km)	33.2 mpg (8.5 1/100 km)
Constant speed 75 mph (120 km/h)	29.1 mpg (9.7 l/100 km)	29.7 mpg (9.5 l/100 km)	27.2 mpg (10.4 1/100 km)
Urban cycle	16.5 mpg (17.1 l/100 km)	15.8 mpg (17.9 l/100 km)	13.5 mpg (21.0 1/100 km)

Tiptronic Transmission - Carrera 2:	Manual mode	Automatic mode
Constant speed 56 mph (90 km/h)	35.8 mpg (7.9 l/100 km)	35.8 mpg (7.9 l/100 km)
Constant speed 75 mph (120 km/h)	29.4 mpg (9.6 l/100 km)	29.4 mpg (9.6 l/100 km)
Urban cycle	16.8 mpg (16.8 l/100 km)	16.5 mpg (17.1 l/100 km)

WEIGHTS

	Carrera 2/ Carrera 2 Tiptronic	Carrera 4	Turbo
Unladen weight (DIN standard)	1350 kg/ 1380 kg Tiptronic	1450 kg	1470 kg
Maximum permitted weight	1690 kg/ 1720 kg Tiptronic	1790 kg	1810 kg

DIMENSIONS

Wheelbase	2272 mm	2272 mm	2272 mm
Track, front	1380 mm	1380 mm	1434 mm
Track, rear	1374 mm	1374 mm	1493 mm
Overall length	4250 mm	4250 mm	4250 mm
Overall width	1652 mm	1652 mm	1775 mm
Height (unladen)	1310 mm	1310 mm	1310 mm
Ground clearance (laden)	120 mm	120 mm	120 mm
Turning circle	11.95 m	11.95 m	11.45 m

PERFORMANCE

Maximum speed mph (km/h)	162 (260)/ 159 (256) Tiptronic	162 (260)	168 (270)
Acceleration 0-62.5 mph (0-100 km/h)	5.7 secs/ 6.6 secs Tiptronic	5.7 secs	5.0 secs

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Dr. Ing. h. c. F. Porsche Aktiengesellschaft, Porschestr. 42, D-7000 Stuttgart 40

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